

Heat of Adsorption of Hexane Vapours on
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RUSSIAN, per, Zhur Fiz Khim, Vol XXX,
No 3, 1956, pp 2105-2121.

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RLI M.4064

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Feb 62

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1. Kinetics of Complete Exchange of Cations, by
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M. Golubvin, 12 pp.

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Sci - Phys, Chem
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1956, Vol 30, pp. 2290-2293
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pp 2327-2336.

AMS RJ-1189

Sci - Phys, Chem
Apr 60

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Use of Crystallization Processes to Obtain Ultra-
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Kolscher, 19 pp.

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SIA R-1632

Sci - Chem
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The Cathodic Reduction of Oxygen as a Function of
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Crystals. 1. The Reduction of Oxygen on Tin,
by V. M. Nikulin and S. M. Kochergin, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10,
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ATS RI-222

REF-50J17R

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(NY-3546).

The Separation of Boron Isotopes by Thermo-Diffusion,
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9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, No 10, 1956,
pp 2318-2322.

JPRS 2477

Sci - Chem
Apr 60

114, 723

An Investigation of the Mechanism of Catalytic Hydrogenation of Organic Sulfur Compounds over an Iron-Chromium Catalyst Using Labeled Atoms. II. Investigations of Isotopic Exchange Reactions, by F. P. Ivanovskiy, R. S. Kalvar'skaya, G. S. Beskova, N. P. Sokolova, 4 pp.

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Assoc Tech Serv-42J8R

Sci
Apr 59

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Methods for Calculating the Properties of Ternary Systems from Experimental Data on Binary Systems, by S. D. Gromakov, 14 pp.

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SLA R-2140

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SLA R-3306

Sci

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Bogdanovskiy, G. A. and Shlygin, A. I.
THE MECHANISM OF ELECTROOXIDATION OF
ALCOHOLS AND ALDEHYDES ON PLATINUM. THE
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Order from ATS \$14.45

ATS-58M47R

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(Chemistry--Physical, TT, v. 5, no. 7)

61-12640

1. Alcohols--Oxidation
2. Aldehydes--Oxidation
3. Platinum--Chemical reactions
4. Ethanol--Oxidation
5. Title: Electrooxidation
- I. Bogdanovskiy, G. A.
- II. Shlygin, A. I.
- III. ATS-58M47R
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Investigation of the Process of Hardening of Phenol-
Formaldehyde Resins. I. Investigation of Resols,
by V. A. Margin, et al.

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1956, pp 2435-2440.

Co-op Tr Sch Tr 429

Sci - Physics
Mar 58

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Formation of Electrolytes and the Heats of
Ionization of Chemical Elements, by I. N.
Ciocchina, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXX, 1956,
pp 2441-2443.

SLA R-2139

Sci

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Krylova, I.V. and Kobzarev, N.I.
MAGNETIQUE DES CENTRES ACTIFS. III. ETUDE
DE MAGNETIQUE DU PROCESSUS PHOTOGRAPHIQUE
(The Magnetocherinty of Active Centres. III. A
Magnetic Investigation of the Photographic Process).
14p. (Paris) CNRS-XVIII 58.
Order from OTS, 50¢ or CNRS \$1.60 TT-62-28869

Trans. in English of Zhurnal Fizicheskoi Khimii (USSR)
1956, v. 30, no. 11, p. 2485-2488.

DESCRIPTORS: *Photographic emulsions, Silver compounds, Halogen compounds, *Magnetic properties, Ultraviolet radiation

TT-62-28869

I. Krylova, I.V.
II. Kobzarev, N.I.
III. CNRS-XVIII 58
IV. Centre National de La Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

(Materials--Photographic, TT, v. 11, no. 5)

III. Normal Combustion of Chlorine-Hydrogen Mixtures, by A. I. Rozlovskiy, 19 pp.

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No 11, 12, 1956, pp 2489-2498, ~~1956-1957~~.
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FTD-TT-62-1688

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Afanas'ev, A.S. and Chankova, E.N.
PHENOMENES DE REDUCTION ELECTROLYTIQUE
AVEC L'ACIER OXYDE. III. REDUCTION ELECTRO-
LYTIQUE DES OXYDES DU FER (Elektrovozstanovitel'-
nye Protsessy na Oksidirovannoi Stali. III. Elektrovozsta-
novlenie Oksidov Zheljeza) (Electrolytic Reduction Pro-
cesses on Oxidized Steel. III. Electroreduction of the
Oxides of Iron). 22p. (Foreign text included) 24 refs.
CNRS-VIII bis 413.

Order from OTS, ETC or CNRS \$0.85 TT-62-28145

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1956, v. 30, no. 11, p. 2525-2532.

DESCRIPTORS: Steel, Oxidation, *Reduction, Electro-
lysis, Surfaces, *Alkaline cells, Cathodes, *Iron
compounds, Oxides, Electric potential.

(Metallurgy--Ferrous Metals, TT, v. 11, no. 7)

TT-62-28145

- I. Afanas'ev, A.S.
- II. Chankova, E.V.
- III. CNRS-VIII bis 413
- IV. Centre National de la Recher-
che Scientifique, Paris

Office of Technical Services
European Translations Centre

A Study of Adsorption of Simple Gases on Metallic
Single Crystals Using the Emission Microscope-
Projector, by S. Z. Roginskiy, I. I. Tret'yakov.

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pp 2539-2546.

Assoc Tech Sv *Te*
\$10.95

Sci - Chemistry
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A Study Using Tagged Atoms, of the Mechanism of the Catalytic Hydrogenation of Organic Sulfur Compounds Over an Iron-Chromium Catalyst. Part 3. A Study of a Sulfided Catalyst, by F. P. Ivanovskiy, R. S. Kal'varskaya, G. S. Beskova, N. P. Sokolova, 6 pp.

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Assoc Tech Sv 80J14R
ATS/R-708

Sci - Nuclear Physics

The Absorption of Hydrogen Chloride and
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Orthophosphoric Acid, by S. G. Entelis and
N. M. Chirkov, 14 pp.

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SIA R-2138

Sci

Aug 58

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The Physical Chemistry of Concentrated Ozone. Part I.
Synthesis of the Higher Peroxide H_2O_4 by Means of
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Sci - Chemistry
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Aug 57

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Papko, S. I. and Nikolayev, I. A.
AU SUJET DE L'ÉTUDE DE LA CINÉTIQUE DES
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Voprosu Ob issledovanii Kinetiki Reaktzii Struinyvm
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Order from O.S. ETC or CNRS \$1.10 TT-62-28191

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1956, v.30, no.11, p.2582-2584.

DESCRIPTORS: *Chemical reactions. Kinetic theory.
Installation, Solutions, Mixtures, Velocity, Reaction
kinetics.

(Chemistry--Physical) TT, v. 11, no. 8)

TT-62-28191

I. Papko, S. I.
II. Nikolayev, I. A.
III. CNRS-VIII bis 414
IV. Centre National de la Recherche
Scientifique, Paris

Office of Technical Services
European Translations Centre

Methods for the Calculation of Properties of
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S. D. Gruzakov, 21 pp.

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pp 2621-2639.

AEC Tr 3291

Sci -- Phys

Sep 58

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Smirnova, I. I.

ON THE ACTIVATION ENERGY OF THE THERMAL DISSOCIATION OF POTASSIUM PERMANGANATE. [1962] 10p. (7 figs. 1 table omitted) 6 refs. Order from OTS or SLA \$1.10 62-16633

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1966, v. 30, no. 12, p. 2649-2655.

DESCRIPTORS: *Permanganates, *Potassium compounds, Pyrolysis, Dissociation, Energy, Reaction kinetics.

Formulas are adduced for the calculation of the activation energies in the processes of the origination (emergence) of initial centers and the nuclear growth of the solid product during the thermal dissociation of potassium permanganate. There are calculated the overall activation energy, the activation energy of the first and second stages in the process of the (Chemistry--Physical, TT, v. 8, no. 9) (over)

62-16633

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Office of Technical Services

Investigation Into the Process of Curing of Phenol-
Formaldehyde Resins. II. Investigation of Resitols,
by G. L. Slonimskiy, et al.

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Co-op Tr Sch Tr 428

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Sci - Physics
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ISOTHERMAL JOULE-THOMPSON EFFECT AND
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MOLECULES. [1964] 25p 26refs
Order from DTS, SIA, or ETC \$3.60 TT-64-14989
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(Physics--Thermodynamics, TT, v. 11, no. 11)

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IV. Kinetics and Mechanism of Reaction in
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WLL R75 2358 *unpublished*

FTD-TT-62-1688

Sci-Chem

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Corrosion Mechanism of Metals in Narrow Clearances
and Gaps. I. Mechanism of "Crevice Corrosion" of
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Rozenfeld, I. K. Marshakov. UNCLASSIFIED

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Sci - Physics, Min/met
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A Simple Radiation Detector, by L. Ya. Davidchuk,
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AEC Tr 2948

Sci - Physics
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The Overvoltage During the Evolution of Chlorine,
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Sci - Chem

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Kinetics of Reactions at the Surfaces of
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AEC-SC-T-65-744

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pp 42-48.

ATS RJ-2178

Sci - Chem

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The Mechanism of Metal Corrosion in
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NIL RTS 2394

CESTI TT 64-19936

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The Dynamic Method of Determining Metal
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RUSSIAN, per, Zhur Fiz Khim, Vol. XXXI,
No 1, 1957, pp 83-92. 9207840

PL-480
OTS 63-11097

Sci - Physics
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IPST No 983

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The Rate of Catalyst Carbonization in the
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No 1, 1957, pp 93-99.

SLA 59-15304

ATS RJ-840

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RUSSIAN, per. Zhur Fiz Khim, No 1, 1957, pp 109-
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Assoc Tech Serv-937168

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Aug 58

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Polarization of the Inner Surface of a Tube, by
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pp 117-127. 9211375

AEC-Tr-5020

Sci - Phys

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Kinetics of Dehydrogenation of Alcohols by A.A.
Balandin and S.L. Kipperman.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol XXXI,
No 1, 1957, pp 139-149.

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Oct. 62

Mechanism of Flotation. Fixing of Particles on
Boundary Between Water and Air Bubbles, by Z. V.
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SIA R-3317

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Effect of Internal Diffusion on the Course
of a Heterogeneous Catalytic Reaction
Retarded by the Reaction Product, by
V. M. Cherednickenko, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
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Sci - Chem

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On the Nature of "Secondary" Potentials in
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Kholmanskiikh.

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TT-64-30076

Sci - Chem

K-H

Mar 59

83,468

61-28189

Kiselev, A. V. and El'mekov, Yu. A.
 ABSOLUTE ADSORPTION ISOTHERMS OF NORMAL-
 ISOP- AND CYCLOPENTANE VAPOURS ON QUARTZ
 AND SILICA GELS. [1961] [15]p. 41 refs. C. E.
 Trans. 1946 [DSIR LLL] M. 4017.
 Order from OTS or SLA \$1.60

61-28189

Trans. of Zhurnal Fiz.[kheskol]. Khim[11] (USSR) 1957
 [v. 31] no. 1 p. 250-262.

DESCRIPTORS: *Hydrocarbons, *Cyclopentanes,
 Pentanes, Vapors, Adsorption, *Quartz, Powders,
 *Silica, Compounds, Dioxides, *Gels, Adsorbents.

By a vacuum capillary microburette method adsorption
 isotherms were determined for n-pentane and cyclo-
 pentane on quartz powder and silica gels of different
 structural types and the absolute and derived adsorp-
 tion isotherms calculated. The absolute adsorption
 isotherm of pentane on quartz coincide with the abso-
 (Chemistry-Physical, TT, v. 6, no. 12) (over)

- I. Kiselev, A. V.
- II. El'mekov, Yu. A.
- III. CE Trans-1946
- IV. DSIR LLL M. 4017
- V. Central Electricity
 Generating Board
 (Gt. Brit.)

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Theory of the Cascade for the Separation of ^BBinary
Mixtures of Isotopes, by O. K. Davtyan, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 283-290.

AEC IGRL-T/CA 70

Sci. Phys

Oct 58

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The Physicochemical and Electrical Properties of
the System TiO_2-ZrO_2 , by Y. M. Kuznetsov, V. G.
Prokhorov, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 2, pp
321-327, 1957.

Assoc Tech Serv 63J16R
ATS RJ-855

Sci - Chem
Aug 58

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On the Mechanism of Metal Corrosion
Under Thin Layers of Electrolytes,
by I. L. Rozenfel'd and T. I.
Pavlutskaya.

RUSSIAN, per, Zhurnal Fizicheskoy
Khimii, 1957, Vol 31, pp 328-339.
NLI RTS 2395 (On Loan or Purchase)

CFSTI TT 65-60361

Aug 65

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Study of the Transformation Sequence of the
Principal Intermediate Products of the Liquid-
Phase Oxidation of Cyclohexane by the Method
of Labeled Atoms, by I. V. Berezin, L. S. Vartanyan,
B. B. Dzantjev, N. F. Kuzanskaya, N. M. Emanuel.
13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957,
pp 340-349.

ATS 96J17 R

Sci - Chem, Nuclear Phys

Oct 60

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Determination of Heat of Transition in Cerium Under
Pressure, by M. G. Gonikberg, G. P. Shakhovskoy,
V. P. Ertuzov, 7 pp. UNCLASSIFIED

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pp 350-353. *TABLE 1*

AEC Tr 3222

Sci - Phys

May 58

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The Production of Carrier-Free ^{137}m In by Irradiating
a Tet Metal-Organic Compound with Neutrons,
by V. D. Nefedov, G. N. Leymov, et al, 13 pp.
RUSSIAN, per. Russ. Fiz. Khim., Vol XXII, 1957,
pp 184-191. 7237219
KRLD-ORNL-Tr-541

Sol-Chem
Aug 58

286,391

Petrova, A. A., Pochtarev, V. I., and
Tsvetkova, E. V.
PRÉPARATION DE UTILISATION DES FILMS
MINCES DE CARBONE POUR LA MICROSCOPIE
ELECTRONIQUE, tr. by de Trazvinsky. 27 Oct 59
[15p. 13 refs. CEA Trans. no. R 753 (Text in French).
Order from OTS or SLA \$1.60 61-23738

Trans. in French of Zh[urnal] Fiz[icheskoi] Khim[ii]
(USSR) 1957, v. 31, no. 2, p. 372-376.

DESCRIPTORS: *Electron microscopes, *Carbon,
*Films.

(Chemistry--Physical, TT, v. 6, no. 6)

61-23738

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- II. Pochtarev, V. I.
- III. Tsvetkova, E. V.
- IV. CEA-tr-R753
- V. Commissariat à l'Énergie
Atomique (France)

176668

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Liquid-Phase Oxidation of Hydrocarbons
in the Presence of Liquid Tetraethyl
Lead, by G. S. Shimonov, I. V. Rozhkov,
15 pp.
RUSSIAN, per: Zhurnal Fizicheskoi Khimii,
Vol 31, No 2, 1957, pp 387-391.
SLA TT-65-10326

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Sci
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The Effects of Temperature and Pressure on the
Composition of Ternary Azeotropes, by A. V.
Storozhin,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 2,
1957, pp 395-402.

ATS RJ-2179

Sci - Chem

May 60

115, 448

Theory of Ion Exchange Dynamics. IV. Equation
of Motion of a Steady Front, by V. V. Rachinskiy,
14 pp.

RUSSIAN, Eng, Zhur Fiz, Khim, Vol XXXI, 1957,
pp 144-151.

AEC/NP-147

Sci. Phys.

Nov 58

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Smirnov, M. V. and Ivabovskii, E. E.
THE DECOMPOSITION POTENTIAL OF FUSED LEAD
AND THORIUM CHLORIDES. [1963] 12p (figs omitted)
Order from K-H \$12.00 K-H-8024-b

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1957,
v. 31 [no. 2] p. 467-473.

DESCRIPTORS: Chlorides, Thorium compounds,
Lead compounds, Fused materials, Decomposition

SLA TT-64-30093

(Chemistry--Physical, TT, v. 10, no. 12)

63-22818

- I. Smirnov, M. V.
- II. Ivabovskii, E. E.
- III. K-H-8024-b
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Library Associates,
Detroit, Mich.

Office of Technical Services

On the Form of Equilibrium Curves of Binary Alloys,
by A. K. Gorkatenko, D. S. Kamenetskaya.

RUSSIAN, per, Zhur Fiz Khim, Vol XLXI, No 2, 1957,
pp 181-184.

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Sci - Chem

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Kinetic Study of the Dimerization of Cyclopentadiene, by M. I. Shuikin, T. I. Naryshkina, 9pp
RUSSIAN, per, Zhurnal Fiz Khim, Vol 31, 1957,
No 2, pp 493-497
SIA TT-64-30126

Sci - Chem
May 67

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Paramagnetic Resonance of Products Formed at Low
Temperatures by the Dissociation in the Glow
Discharge of H_2O , H_2O_2 and D_2O Vapors, by A. I.
Gorbunov, S. D. Khaizmazov, A. M. Prokhorov, A. B.
Tsentsiper, 31 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1957, pp
515.

AEC 3329

Sci - Phys

Oct 58

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Determination of the Structural Nature
and Specific Surface of a Porous Body
According to the Isotherm of Desorption,
by B. V. Deriagin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI,
No 2, 1957, pp 516-518.

CSIRO

Sci. Chem

Feb 62

186,566

Structure of Some Liquids. II. Structure of
Water and of Aqueous Solutions of Electrolytes,
by O. Ya. Samoilov,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, No 3, 1957,
pp 537-553.

ATS RJ-1261

Sci - Phys, Chem
Apr 60

114,575

Intermediate Reactions of Cyclohexyl Hydroperoxide,
Cyclohexanol, and Cyclohexanone during the Oxidation
of Cyclohexane in a Glass Reactor, by I. V.

Berezin, B. G. Dzantiev. 12 pp.

RUSSIAN, per, Zhur Fiz Khim, 1957, vol 31, No 3,

pp 554-562.

SLA TT 64-18410

Jul 66

3015, 468

16 302

Fr-2

NEFEDOV V. D., ANDREEV V. I.

Examination of the chemical condition of RaE appearing as a result
of the disintegration of RaO entering into the composition of certain
phenylic derivatives

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REQ TR CHECK

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TZ29

THE ELECTROCHEMICAL BEHAVIOR OF TITANIUM
IN AQUEOUS SOLUTIONS I. HYDROGEN OVERPOTENTIAL
ON TITANIUM

KOLOTYRKIN YA M

UR: ZHURNAL FIZICHESKOY KHIMII
1957, vol 31, nr 3, pp 659-671

In process
HS-72-23-0511

*neg**2/28/71*

REQ TR CHECK

13-12-7

TZ29

THE ELECTROCHEMICAL BEHAVIOR OF TITANIUM
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DESCRIPTORS: *Thorium, Ions, Reduction (Chemistry),
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DESCRIPTORS: *Liquids, Physical properties, Theory, *Vapor pressure, Temperature, Viscosity, Density, Crystallization, *Thermodynamics, Fluid dynamics.

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DESCRIPTORS: *Eutectics. *Chemical equilibrium.
 Topology. Mathematical analysis.

For abstract see Technical Translations 4: 145, 1960.

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Office of Technical Services

Fr-2

Investigation into the chemical state of thorium C formed by the disintegration of thorium B entering into the composition of certain phenylated derivatives of lead

Etude de l'état chimique du thorium C formé par désintégration du thorium B entrant dans la composition de quelques dérivés phényles du plomb

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